Regulating human interventions in Colombian coastal areas: Implications for the environmental licensing procedure in middle-income countries

Cristina I. Pereira, Andres F. Carvajal, Celene Milanés Batista, Camilo M. Botero

Abstract

Although anthropogenic impacts could be assessed in any environment, coastal areas pose a particular challenge because of their special nature as the interface between land and sea. Therefore, this study evaluates the environmental regulatory framework for coastal interventions in Colombia, as an archetype of medium income countries (MICs), to derive implications for the environmental licensing procedure (ELP). The methods comprised two simultaneous pathways: a. An inventory of human interventions at the large scale area of the Colombian Caribbean Coast, with an estimation of the overall environmental impact; b. An analysis of the ELP in Colombia during the last 25 years. The study evidences several weaknesses, such as a consistent reduction in the number of works and activities covered in each new legislative. Moreover, the Colombian ELP currently regulates only four of the ten types of interventions with greater effect in its coastal zones. The discussions highlight some policy implications for the ELP in MICs, mainly based on how the impact of a type of intervention can be magnified in proportion to its frequency of occurrence, and the need to articulate instruments of environmental management and territorial planning. At last, the need to evolve the impact assessment of human interventions from environmental factors toward socio-natural processes is evidenced and further addressed, by the introduction of a susceptibility approach inspired on geomorphological processes. Overall, this study highlights important gaps of the Colombian ELP for coastal environments, which entails valuable lessons for MICs.

Keywords: Environmental licensing procedure; Middle-income countries; Territorial planning; Environmental regulatory framework; Integrated coastal and ocean management